Negotiated Rule Draft No. 4, Docket No. 58-0111-0801
Dated May 27, 2008
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007. DEFINITIONS.

01. Agricultural Chemical. Any pesticide, nutrient or fertilizer used for the benefit of agricultural production or pest management. (3-20-97)

02. Aquifer. A geological unit of permeable saturated material capable of yielding economically significant quantities of water to wells and springs. (3-20-97)

03. Beneficial Uses. Various uses of ground water in Idaho including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, aquacultural water supplies, and mining. A beneficial use is defined as actual current or projected future uses of ground water. (3-20-97)

04. Best Available Method. Any system, process, or method which is available to the public for commercial or private use to minimize the impact of point or nonpoint sources of contamination on ground water quality. (3-20-97)

05. Best Management Practice. A practice or combination of practices determined to be the most effective and practical means of preventing or reducing contamination to ground water and interconnected surface water from nonpoint and point sources to achieve water quality goals and protect the beneficial uses of the water. (3-20-97)

06. Best Practical Method. Any system, process, or method that is established and in routine use which could be used to minimize the impact of point or nonpoint sources of contamination on ground water quality. (3-20-97)

07. Board. The Idaho Board of Environmental Quality. (3-20-97)

08. Cleanup. The removal, treatment or isolation of a contaminant from ground water through the directed efforts of humans or the removal or treatment of a contaminant in ground water through management practice or the construction of barriers, trenches and other similar facilities for prevention of contamination, as well as the use of natural processes such as ground water recharge, natural decay and chemical or biological decomposition. (3-20-97)

09. Constituent. Any chemical, ion, radionuclide, synthetic organic compound, microorganism, waste or other substance occurring in ground water. (3-20-97)

10. Contaminant. Any chemical, ion, radionuclide, synthetic organic compound, microorganism, waste or other substance which does not occur naturally in ground water or which naturally occurs at a lower concentration. (3-20-97)

11. Contamination. The direct or indirect introduction into ground water of any contaminant caused in whole or in part by human activities. (3-20-97)

12. Crop Root Zone. The zone that extends from the surface of the soil to the depth of the deepest crop root and is specific to a species of plant, group of plants, or crop. (3-20-97)

13. Degradation. The lowering of ground water quality as measured in a statistically significant and reproducible manner. (3-20-97)

14. Department. The Department of Environmental Quality. (3-20-97)

15. Ground Water. Any water of the state which occurs beneath the surface of the earth in a saturated geological formation of rock or soil. (3-20-97)

16. Ground Water Quality Standard. Values, either numeric or narrative, assigned to any constituent for the purpose of establishing minimum levels of protection. (3-20-97)

17. Highly Vulnerable Ground Water. Ground water characterized by a relatively high potential for contaminants to enter and/or be transported within the flow system. Determinations of ground water vulnerability will include consideration of land use practices and aquifer characteristics. (3-20-97)

18. Irreplaceable Source. A ground water source serving a beneficial use(s) where the reliable delivery of comparable quality and quantity of water from an alternative source in the region would be economically infeasible or precluded by institutional constraints. (3-20-97)

19. Mineral Extraction. Recovery of a mineral from mineral-bearing deposits, which includes extraction, excavation, overburden placement and disposal of waste rock. ( )

20. Mineral Extraction Area. The area on or within which mineral extraction occurs. The Department shall determine the boundaries of the mineral extraction area as provided in Subsection 400.06. ( )

~~19~~**21. Natural Background Level**. The level of any constituent in the ground water within a specified area as determined by representative measurements of the ground water quality unaffected by human activities. (3-20-97)

~~20~~**22. Person**. Any individual, association, partnership, firm, joint stock company, joint venture, trust, estate, political subdivision, public or private corporation, state or federal governmental department, agency or instrumentality, or any legal entity which is recognized by law as the subject of rights and duties. (3-20-97)

XX. Point of Compliance. The vertical surface where the Department determines compliance with ground water quality standards as provided in Subsections 400.05 and 400.06. ( )

~~21~~**23. Practical Quantitation Level**. The lowest concentration of a constituent that can be reliably quantified among laboratories within specified limits of precision and accuracy during routine laboratory operating conditions. Specified limits of precision and accuracy are the criteria listed in the calibration specifications or quality control specifications of an analytical method. (3-20-97)

~~22~~**24. Projected Future Beneficial Uses**. Various uses of ground water, such as drinking water, aquaculture, industrial, mining or agriculture, that are practical and achievable in the future based on hydrogeologic conditions, water quality, future land use activities and social/economic considerations. (3-20-97)

~~23~~**25. Recharge Area**. An area in which water infiltrates into the soil or geological formation from, including but not limited to precipitation, irrigation practices and seepage from creeks, streams, and lakes, and percolates to one (1) or more aquifers. (3-20-97)

~~24~~**26. Remediation**. Any action taken (1) to control the source of contamination, (2) to reduce the level of contamination, (3) to mitigate the effects of contaminants, and/or (4) to minimize contaminant movement. Remediation includes providing alternate drinking water sources when needed. (3-20-97)

~~25~~**27. Site Background Level**. The ground water quality at the hydraulically upgradient site boundary. (3-20-97)

(BREAK IN CONTINUITY OF SECTIONS)

350. PROCEDURES FOR CATEGORIZING OR RECATEGORIZING AN AQUIFER.
The following process shall be used for categorizing or recategorizing an aquifer. (3-20-97)

01. Criteria for Aquifer Categories. The following criteria shall be considered when a petition to categorize or recategorize aquifers or portions of aquifers is submitted to the Board: (3-20-97)

a. For Sensitive Resource aquifers: (3-20-97)

i. The ground water in an aquifer or portion of an aquifer is of a better quality than the ground water quality standards in Section 200 and maintenance of this quality is needed to protect an identified beneficial use(s); (3-20-97)

ii. The ground water in an aquifer or portion of an aquifer is considered highly vulnerable; (3-20-97)

iii. The ground water in an aquifer or portion of an aquifer represents an irreplaceable source for the identified beneficial use(s); (3-20-97)

iv. The ground water quality in an aquifer or portion of an aquifer has been degraded and there is a need for additional protection measures to maintain or improve the water quality or prevent impairment of a beneficial use; (3-20-97)

v. The ground water within an aquifer or portion of an aquifer is shown to be hydrologically interconnected with surface water and additional protection is needed to maintain the quality of either surface or ground water. Hydrologic interconnections can include either natural or induced ground water recharge or discharge areas; or (7-1-98)

vi. The ground water within an aquifer or portion of an aquifer demonstrates other criteria which justify the need for additional protection. (3-20-97)

b. For General Resource aquifers: (3-20-97)

i. An activity with the potential to degrade ground water quality is initiated over an aquifer or portion of an aquifer which presently has no such activities; (3-20-97)

ii. The ground water in an aquifer or portion of an aquifer is currently being used for drinking water or another beneficial use which requires similar protection; or (3-20-97)

iii. The ground water in an aquifer or portion of an aquifer has a projected future beneficial use of drinking water or another beneficial use which requires similar protection. (3-20-97)

c. For other resource aquifers: (3-20-97)

i. The ground water quality within an aquifer or portion of an aquifer does not meet one or more of the ground water quality standards in Section 200; and allowing the ground water quality to remain at this level does not impair existing or projected future beneficial uses within the aquifer or portion of an aquifer; (3-20-97)

ii. The projected ground water quality within an aquifer or portion of an aquifer will not meet one or more of the ground water quality standards in Section 200 as a result of activities over or within the aquifer or portion of an aquifer; and allowing the proposed degradation will not impair existing or projected future beneficial uses; (3-20-97)

iii. Human caused conditions or sources of contamination have resulted in ground water quality standards in Section 200 being exceeded, and the contamination cannot be remedied for economical or technical reasons, or remediation would cause more environmental damage to correct than to leave in place; ~~*or (3-20-97)*~~(____)

iv. In areas where mineral extraction will occur or is occurring and ground water quality standards will be or are exceeded despite the application of all relevant best management practices, best available methods or best practical methods, as appropriate for the aquifer category~~, or where mineral extraction has occurred and the Department has determined pursuant to Subsection 400.06 that naturally occurring constituents in ground water are not contaminants~~. The categorization decision based upon these circumstances shall take into account the affect on human health and the environment, including existing or projected beneficial uses of the aquifer; or ( )

~~i~~v. The ground water within an aquifer or portion of an aquifer demonstrates other criteria which justify the need for categorization as an Other Resource. (3-20-97)

02. Petition Process. The Department or any other person may petition the Board to initiate rulemaking to categorize or recategorize an aquifer or portion of an aquifer pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." In addition to the information required in a rulemaking Petition pursuant to IDAPA 58.01.23, the following information shall be submitted in writing by the Petitioner for the identified aquifer or portion of an aquifer: (3-15-02)

a. Current category, if applicable; (3-20-97)

b. Proposed category and an explanation of how one or more of the criteria in Subsection 350.01 are met; (3-20-97)

c. An explanation of why the categorization or recategorization is being proposed; (3-20-97)

d. Location, description and areal extent; (3-20-97)

e. General location and description of existing and projected future ground water beneficial uses; (3-20-97)

f. Documentation of the existing ground water quality; (3-20-97)

g. Documentation of aquifer characteristics, where available, including, but not limited to: (3-20-97)

i. Depth to ground water; (3-20-97)

ii. Thickness of the water bearing section; (3-20-97)

iii. Direction and rate of ground water flow; (3-20-97)

iv. Known recharge and discharge areas; and (3-20-97)

v. Geology of the area; (3-20-97)

h. Identification of any proposed standards, for specified constituents, which would be stricter or less strict than the ground water quality standards in Section 200, or any standards to be applied in addition to those in Section 200; and a rationale for the proposed standards. (3-20-97)

03. Preliminary Department Review. Prior to submission of a petition to the Board to categorize or recategorize an aquifer, any person may seek a preliminary review of the petition from the Department. The Department shall respond to the petitioner with comments within forty-five (45) days. (3-20-97)

351. -- 399. (RESERVED).

400. GROUND WATER CONTAMINATION.

01. Releases Degrading Ground Water Quality. No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a

manner that:
(3-20-97)

a. Causes a ground water quality standard to be exceeded; (3-20-97)

b. Injures a beneficial use of ground water; or (3-20-97)

c. Is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method. (3-20-97)

02. Prevention Measures. (3-20-97)

a. When a numerical standard is not exceeded, but degradation of ground water quality is detected and deemed significant by the Department, the Department shall take one (1) or more of the following actions:(3-20-97)

i. Require a modification of regulated activities to prevent continued degradation; (3-20-97)

ii. Coordinate with the appropriate agencies and responsible persons to develop and implement prevention measures for activities not regulated by the Department; (3-20-97)

iii. Allow limited degradation of ground water quality for the constituents identified in Subsection 200.01.a. if it can be demonstrated that: (3-30-07)

(1) Best management practices, best available methods or best practical methods, as appropriate for the aquifer category, are being applied; and (3-20-97)

(2) The degradation is justifiable based on necessary and widespread social and economic considerations; or(3-20-97)

iv. Allow degradation of ground water quality up to the standards in Subsection 200.01.b., if it can be demonstrated that: (3-20-97)

(1) Best management practices are being applied; and (3-20-97)

(2) The degradation will not adversely impact a beneficial use. (3-20-97)

b. The following criteria shall be considered when determining the significance of degradation: (3-20-97)

i. Site specific hydrogeologic conditions; (3-20-97)

ii. Water quality, including seasonal variations; (3-20-97)

iii. Existing and projected future beneficial uses; (3-20-97)

iv. Related public health issues; and (3-20-97)

v. Whether the degradation involves a primary or secondary constituent in Section 200. (3-20-97)

03. Contamination Exceeding a Ground Water Quality Standard. The discovery of any contamination exceeding a ground water standard that poses a threat to existing or projected future beneficial uses of ground water shall require appropriate actions, as determined by the Department, to prevent further contamination. These actions may consist of investigation and evaluation, or enforcement actions if necessary to stop further contamination or clean up existing contamination, as required under the Environmental Protection and Health Act, Section 39-108, Idaho Code. (3-20-97)

04. Agricultural Chemicals. Agricultural chemicals found in intermittently saturated soils within the crop root zone will not be considered ground water contaminants as long as the chemicals remain within the crop root zone, and have been applied in a manner consistent with all appropriate regulatory requirements. (3-20-97)

05. Site-Specific Ground Water Quality Levels or Points of Compliance. The Department may allow site-specific ground water quality levels, for any aquifer category, that vary from a standard(s) in Section 200 or Section 300, or may allow site-specific points of compliance, based on consideration of effects to human health and the environment, for: ~~(3-20-97)~~( )

a. Remediation conducted under the Department's oversight; (3-20-97)

b. Permits issued by the Department; (3-20-97)

c. Situations where the site background level varies from the ground water quality standard; ~~or~~ ~~(3-20-97)~~( )

d. Dissolved concentrations of secondary constituents listed in Section 200. The Department may allow the use of dissolved concentrations for secondary constituents if the requesting person demonstrates that doing so will not adversely affect human health and the environment; or ( )

~~**d**~~**e.** Other situations authorized by the Department in writing. (3-20-97)

06. Mineral Extraction. ~~Naturally occurring constituents found in ground water within a specified area surrounding an active mineral extraction area, as determined by the Department, will not be considered contaminants as long as all applicable best management practices, best available methods or best practical methods, as approved by the Department, are applied. (7-1-98)~~

a. At the request of a mine operator, the Department shall set a point of compliance, or points of compliance, at which the mine operator must meet the ground water quality standards as described in Subsection 150.01. With the request, the mine operator shall submit to the Department a map that identifies the location of all extraction, excavation, overburden placement, and waste rock disposal areas. The mine operator shall also submit to the Department information regarding the relevant factors set forth in Subsection 400.06.b. The Department shall set the point(s) of compliance based upon the information submitted by the mine operator and any other relevant information. ~~A mine operator must meet the ground water quality standards as described in Subsection 150.01 at the boundary of the mineral extraction area, or an alternative boundary set by the Department pursuant to Subsection 400.06.b.~~ Mineral extraction activities must be managed using the level of protection appropriate for the aquifer category in accordance with Subsection 150.02 and Section 301. ~~The mineral extraction area boundary means the outermost perimeter of the mineral extraction area (projected in the horizontal plane) as it would exist at the completion of the mineral extraction. The mine operator shall submit to the Department a map that identifies the location of all extraction, excavation, overburden placement and disposal of waste rock. If an alternative boundary is requested, the mine operator shall also submit to the Department information regarding the relevant factors set forth in Subsection 400.06.b. The Department shall set the boundary of the mineral extraction area based upon the information submitted by the mine operator and any other relevant information.~~

b. ~~For purposes of compliance with the ground water quality standards, the Department may establish an alternative boundary to be used in lieu of the mineral extraction area boundary only if the Department finds that such a change would not injure a~~ The point(s) of compliance shall be set as close as possible to the boundary of the mineral extraction area, but in no event shall the point(s) of compliance be within the boundary of the mineral extraction area. The mineral extraction area boundary means the outermost perimeter of the mineral extraction area (projected in the horizontal plane) as it would exist at the completion of the mineral extraction. The point(s) of compliance shall be set so that, outside the mineral extraction area boundary, there is no injury to current or projected future beneficial uses of ground water and ~~that such a change would not result in~~ there is no violation of Water Quality Standards applicable to any interconnected surface waters. ~~Such a finding~~ The Department's determination regarding the point(s) of compliance shall be based on an analysis and consideration of all relevant factors including, but not limited to:

i. The hydrogeological characteristics of the mineral extraction area and surrounding land, including any natural attenuation and dilution characteristics of the aquifer;

ii. The volume and physical and chemical characteristics of contaminants resulting from the mineral extraction, including the toxicity and persistence of the contaminants;

iii. The quantity, quality, and direction of flow of ground water underlying the mineral extraction area;

iv. The proximity and withdrawal rates of current ~~or projected future~~ ground water users;

v. A prediction of projected future ground water uses, taking into consideration whether such uses are practical and achievable in the future based on hydrogeologic conditions, water quality, future land use activities, and social/economic considerations;

vi. The availability of alternative drinking water supplies;

vii. The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water; and

viii. Public health, safety, and welfare effects.

c. The Department may require ground water monitoring and reporting whenever the Department sets the ~~boundary of the mineral extraction area or an alternative boundary~~ point(s) of compiance. The Department shall not require ground water monitoring that duplicates ground water monitoring required by other state or federal agencies. A ground water monitoring system required under this subsection shall be designed to:

i. Represent the quality of background ground water that has not been affected by the mineral extraction;

ii. Represent the quality of ground water passing the ~~mineral extraction area boundary or the alternative boundary~~ point(s) of compliance in order to determine compliance with ground water quality standards or effectiveness of best management practices; and

iii. ~~If an alternative boundary is set by the Department, i~~Indicator monitoring wells or other devices may be required. Indicator wells shall not be used to determine compliance with the ground water quality standards, but instead may be used to validate modeling results or to predict the quality of ground water at the mineral extraction or ~~alternative boundary~~ at the point(s) of compliance.

d. Before setting the ~~mineral extraction area boundary or an alternative boundary~~ point(s) of compliance or requiring ground water monitoring, the Department shall coordinate with and seek recommendations from other state or federal agencies that have regulatory authority over the mineral extraction activities. The Department may provide an opportunity for public participation when setting ~~an alternative boundary~~ the point(s) of compliance.

e. Subsection 400.06 addresses only those contaminants that naturally occur in the mineral extraction area ground water or in the surrounding rock or soil and are present in concentrations above the natural background level as a result of mineral extraction.

f. The provisions set out in Subsection 400.06 apply to new mineral extraction activities or to an expansion of existing mineral extraction activities commencing after July 1, 2009. All consent orders, compliance schedules, and other agreements adopted or issued by the Department prior to July 1, 2009 pertaining to ground water protection at mine sites shall remain in full force and effect.